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EXAMINER

FOX, BRYAN J

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/931,280	<b>Applicant(s)</b> OHLSSON ET AL.	
	<b>Examiner</b> Bryan J. Fox	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-10,12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-10,12,14-20,22 and 23 is/are rejected.
- 7) ☒ Claim(s) 19 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 6, 7, 9, 10, 14, 15, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willey (US 5,920,550) in view of Tiedmann, Jr et al (US 6,246,673).

Regarding claim 1, Willey discloses a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40), which reads on the claimed, "for use in a telecommunications system having a source base station and a destination base station where a specified mobile station establishes a connection with the source base station, a method

comprising: upon receipt of a first measurement report from the specified mobile station, initiating...a preliminary portion of a handover sequence for the specified mobile station," wherein the Access Channel Message reads on the first measurement report and creating a first Active Set. In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more current pilot strength measurements than those in the first Access Channel Message (see column 5, lines 23-40), which reads on the claimed, "upon receipt of a second measurement report from the specified mobile station," and, "wherein the first measurement report from the specified mobile station and the second measurement report from the specified mobile station include differing values of a signal quality measurement of a pilot signal from the destination base station as received by the specified mobile station." When a different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set according to the second set of measured pilot strengths (see column 5, lines 41-56), which reads on the claimed, "initiating at the destination base station another portion of a handover sequence for the specified mobile station." Willey fails to disclose the preliminary portion of the handover sequence includes uplink radio synchronization with respect to the specified mobile station and occurs at the destination base station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Regarding claim 2, Willey discloses a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40), which reads on the claimed, "for use in a telecommunications system having a source base station and a destination base station where a specified mobile station establishes a connection with the source base station, a method comprising: upon receipt of a first measurement report from the specified mobile station, initiating...a preliminary portion of a handover sequence for the specified mobile station," wherein the Access Channel Message reads on the first measurement report and creating a first Active Set. In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more current pilot strength measurements than those in the first Access Channel Message

(see column 5, lines 23-40), which reads on the claimed, "upon receipt of a second measurement report from the specified mobile station," and, "wherein the first measurement report from the specified mobile station and the second measurement report from the specified mobile station include differing values of a signal quality measurement of a pilot signal from the destination base station as received by the specified mobile station." When a different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set according to the second set of measured pilot strengths (see column 5, lines 41-56), which reads on the claimed, "initiating at the destination base station another portion of a handover sequence for the specified mobile station." Willey fails to disclose the preliminary portion of the handover sequence occurs at the destination base station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49), which reads on the claimed preliminary portion of a handover sequence, wherein "the preliminary portion of the handover sequence involving an operation between the destination base station and the specified mobile station that are more time critical than operations performed during the another portion of the handover sequence."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the

timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Regarding claim 6, Willey fails to disclose the preliminary portion of the handover sequence includes uplink radio synchronization with respect to the specified mobile station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Regarding claim 7, the combination of Willey and Tiedmann, Jr et al discloses a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40). . In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more current pilot strength measurements than those in the first Access Channel Message (see column 5, lines 23-40). When a

different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set according to the second set of measured pilot strengths (see column 5, lines 41-56), which reads on the claimed, "the another portion of the handover sequence comprises remaining events of a conventional handover sequence which were not included in the preliminary portion of the handover sequence," wherein one of ordinary skill in the art would recognize that when a method is divided into two portions, the second portion would contain the remaining events not included in the preliminary portion.

Regarding claim 9, Willey discloses a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40), which reads on the claimed, "telecommunications system comprising a control node and a destination base station, wherein: the control node is configured to initiate...upon receipt of a first measurement report from the specified mobile station, a preliminary portion of a handover sequence for the specified mobile station," wherein the Access Channel Message reads on the first measurement report and creating a first Active Set. In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more



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current pilot strength measurements than those in the first Access Channel Message (see column 5, lines 23-40), which reads on the claimed, "the first measurement report from the specified mobile station and the second measurement report from the specified mobile station including differing values of a signal quality measurement of a pilot signal from the destination base station as received by the specified mobile station." When a different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set according to the second set of measured pilot strengths (see column 5, lines 41-56), which reads on the claimed, subsequently upon receipt of a second measurement report from the specified mobile station to initiate at the destination base station another portion of the handover sequence for the specified mobile station." Willey fails to disclose the preliminary portion of the handover sequence includes uplink radio synchronization with respect to the specified mobile station and occurs at the destination base station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Regarding claim 10, Willey discloses a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40), which reads on the claimed, "telecommunications system comprising a control node and a destination base station, wherein: the control node is configured to initiate...upon receipt of a first measurement report from the specified mobile station, a preliminary portion of a handover sequence for the specified mobile station," wherein the Access Channel Message reads on the first measurement report and creating a first Active Set. In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more current pilot strength measurements than those in the first Access Channel Message (see column 5, lines 23-40), which reads on the claimed, "the first measurement report from the specified mobile station and the second measurement report from the specified mobile station including differing values of a signal quality measurement of a pilot signal from the destination base station as received by the specified mobile station." When a different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set according to the second set of measured pilot strengths (see column 5, lines 41-56),

which reads on the claimed, subsequently upon receipt of a second measurement report from the specified mobile station to initiate at the destination base station another portion of the handover sequence for the specified mobile station.” Willey fails to disclose the preliminary portion of the handover sequence occurs at the destination base station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49), which reads on the claimed preliminary portion of a handover sequence, wherein “in performing the preliminary portion of the handover sequence, is configured to perform operations which are more time critical than operations included in the another portion of the handover sequence.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Regarding claim 14, Willey fails to disclose the preliminary portion of the handover sequence includes uplink radio synchronization with respect to the specified mobile station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Regarding claim 15, the combination of Willey and Tiedmann, Jr et al disclose a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40). . In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more current pilot strength measurements than those in the first Access Channel Message (see column 5, lines 23-40). When a different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set according to the second set of measured pilot strengths (see column 5, lines 41-56), which reads on the claimed, "the another portion of the handover sequence comprises remaining events of a conventional handover sequence which were not included in the preliminary portion of the handover sequence," wherein one of ordinary skill in the art

would recognize that when a method is divided into two portions, the second portion would contain the remaining events not included in the preliminary portion.

Regarding claim 22, the combination of Willey and Tiedmann, Jr et al discloses a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40). . In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more current pilot strength measurements than those in the first Access Channel Message (see column 5, lines 23-40). When a different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set according to the second set of measured pilot strengths (see column 5, lines 41-56), which reads on the claimed, "upon receipt of the first measurement report from the specified mobile station, initiating...the preliminary portion of the handover sequence for establishing a connection leg between the destination base station and the specified mobile station; and, upon receipt of the second measurement report from the specified mobile station, initiating at the destination base station the another portion of the handover sequence for establishing the connection leg between the destination base

station and the specified mobile station." Willey fails to disclose the preliminary portion of the handover sequence occurs at the destination base station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Regarding claim 23, the combination of Willey and Tiedmann, Jr et al discloses a base station eventually receives a first one of the access probes and thus the Access Channel Message. The infrastructure begins to allocate the Active Set channels, by creating a first Active Set according to the first set of measured pilot strengths, and begins setting up resources to handle the call (see column 5, lines 11-40). . In some situations the radiotelephone may transmit another access probe before it receives the acknowledgement of receipt of the Access Channel Message. Accordingly, base station 102 will receive another Access Channel Message, referred to as the second Access Channel Message, which specifies more current pilot strength measurements than those in the first Access Channel Message (see column 5, lines 23-40). When a different Active Set is not necessary, the method ends, but when a different active set is necessary, the base station waits until the subscriber unit is acquired on the Reverse Traffic Channel and allocates the Active Set Channels, by creating a second Active Set

according to the second set of measured pilot strengths (see column 5, lines 41-56), which reads on the claimed, "the control node is configured to initiate...upon receipt of the first measurement report from the specified mobile station, the preliminary portion of the handover sequence for establishing a connection leg between the destination base station and the specified mobile station, and then subsequently upon receipt of the second measurement report from the specified mobile station to initiate at the destination base station another portion of the handover sequence for establishing the connection leg between the destination base station and the specified mobile station." Willey fails to disclose the preliminary portion of the handover sequence occurs at the destination base station.

In a similar field of endeavor, Tiedmann, Jr. et al disclose a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see column 17, lines 28-49), which reads on the claimed preliminary portion of a handover sequence, wherein "in performing the preliminary portion of the handover sequence, is configured to perform operations which are more time critical than operations included in the another portion of the handover sequence."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Willey with Tiedmann, Jr. et al to include the above fixing the timing error in the preliminary portion of the handover sequence in order to provide a faster transition as suggested by Tiedmann, Jr. et al (see column 7, lines 34-49).

Claims 4, 8, 12, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willey in view of Tiedmann, Jr et al as applied to claims 1, 2, 9 and 10 above, and further in view of Muszynski (US 6,009,328).

Regarding claim 4, the combination of Willey and Tiedmann, Jr et al fails to expressly disclose upon receipt of the first measurement report from the specified mobile station, a control node allocates uplink resources for the specified mobile station to communicate with the destination base station.

In a similar field of endeavor, Muszynski discloses that BS 22 will further start demodulating the CDMA uplink connection after the first PSMM (see column 9, lines 16-45), which reads on the claimed, "upon receipt of the first measurement report from the specified mobile station, a control node allocates uplink resources for the specified mobile station to communicate with the destination base station."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Willey and Tiedmann, Jr et al with Muszynski to include the above demodulation of the CDMA uplink after the first PSMM in order to provide seamless soft handoff throughout the service area of a whole cellular telecommunications system.

Regarding claim 8, the combination of Willey and Tiedmann, Jr et al fails to disclose the another portion of the handover sequence comprises transferring user data between the control node and the destination base station.

In a similar field of endeavor, Muszynski discloses upon termination of the soft handover the MSC sends a termination message via the base stations to the MS and



signal diversity combining is stopped (see column 10, lines 6-54), which reads on the claimed, "the another portion of the handover sequence comprises...transferring user data between the control node and the destination base station," wherein the termination message would need to include identifying information of the terminal, which reads on the claimed, "user data."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Willey and Tiedmann, Jr et al with Muszynski to include the above demodulation of the CDMA uplink after the first PSMM in order to provide seamless soft handoff throughout the service area of a whole cellular telecommunications system.

Regarding claim 12, the combination of Willey and Tiedmann, Jr et al fails to expressly disclose upon receipt of the first measurement report from the specified mobile station, a control node allocates uplink resources for the specified mobile station to communicate with the destination base station.

In a similar field of endeavor, Muszynski discloses that BS 22 will further start demodulating the CDMA uplink connection after the first PSMM (see column 9, lines 16-45), which reads on the claimed, "upon receipt of the first measurement report from the specified mobile station, a control node is configured to allocate uplink resources for the specified mobile station to communicate with the destination base station."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Willey and Tiedmann, Jr et al with Muszynski to include the above demodulation of the CDMA uplink after the first PSMM in order to

provide seamless soft handoff throughout the service area of a whole cellular telecommunications system.

Regarding claim 16, the combination of Willey and Tiedmann, Jr et al fails to disclose the another portion of the handover sequence comprises transferring user data between the control node and the destination base station.

In a similar field of endeavor, Muszynski discloses upon termination of the soft handover the MSC sends a termination message via the base stations to the MS and signal diversity combining is stopped (see column 10, lines 6-54), which reads on the claimed, "the another portion of the handover sequence comprises...transferring user data between the control node and the destination base station," wherein the termination message would need to include identifying information of the terminal, which reads on the claimed, "user data."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Willey and Tiedmann, Jr et al with Muszynski to include the above demodulation of the CDMA uplink after the first PSMM in order to provide seamless soft handoff throughout the service area of a whole cellular telecommunications system.

Regarding claim 17, the combination of Willey and Tiedmann, Jr et al fails to disclose the control node is a RNC.

In a similar field of endeavor, Muszynski discloses that the control node is a MSC (see figure 1), which reads on the claimed, "the control node is a radio network control node of a radio access network."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Willey and Tiedmann, Jr et al with Muszynski to include the above demodulation of the CDMA uplink after the first PSMM in order to provide seamless soft handoff throughout the service area of a whole cellular telecommunications system.

Regarding claim 18, the combination of Willey and Tiedmann, Jr et al, as applied to claims 1 and 2, discloses a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see Tiedmann, Jr et al column 17, lines 28-49). The combination of Willey and Tiedmann, Jr et al fails to disclose the preliminary portion of the handover sequence comprises sending an uplink setup request message from a control node to the destination base station, turning on a receiver at the destination base station to listen to the specified mobile station and the destination base station, and sending a mobile station detected message from the destination base station to the control node.

In a similar field of endeavor, Muszynski discloses the handoff begins with the MS sending signal quality measurements indicating that a soft handoff is appropriate. The MSC passes an inter-MSC soft handoff request to the second MSC, which passes this handoff request further on to the BS (see column 9, lines 10-59), which reads on the claimed, "sending an uplink setup request message from a control node to the destination base station." The BSA will further start demodulating the CDMA uplink connection (see column 9, lines 10-59), which reads on the claimed, "turning on a receiver at the destination base station to listen to the specified mobile station and the

destination base station.” The BS will start relaying the user communication signals back to the MSC (see Muszynski column 9, lines 10-59), which reads on the claimed, “sending a mobile station detected message from the destination base station to the control node.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Willey and Tiedmann, Jr et al with Muszynski to include the above demodulation of the CDMA uplink after the first PSMM in order to provide seamless soft handoff throughout the service area of a whole cellular telecommunications system.

Regarding claim 20, the combination of Willey and Tiedmann, Jr et al, as applied to claims 9 and 10, discloses a pilot strength measurement report triggers the target base station to fix timing error between it and the mobile station in the forward link (see Tiedmann, Jr et al column 17, lines 28-49). The combination of Willey and Tiedmann, Jr et al fails to disclose the preliminary portion of the handover sequence comprises sending an uplink setup request message from a control node to the destination base station, turning on a receiver at the destination base station to listen to the specified mobile station and the destination base station, and sending a mobile station detected message from the destination base station to the control node.

In a similar field of endeavor, Muszynski discloses the handoff begins with the MS sending signal quality measurements indicating that a soft handoff is appropriate. The MSC passes an inter-MSC soft handoff request to the second MSC, which passes this handoff request further on to the BS (see column 9, lines 10-59), which reads on

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the claimed, "sending an uplink setup request message from a control node to the destination base station." The BSA will further start demodulating the CDMA uplink connection (see column 9, lines 10-59), which reads on the claimed, "turning on a receiver at the destination base station to listen to the specified mobile station and the destination base station." The BS will start relaying the user communication signals back to the MSC (see Muszynski column 9, lines 10-59), which reads on the claimed, "sending a mobile station detected message from the destination base station to the control node."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Willey and Tiedmann, Jr et al with Muszynski to include the above demodulation of the CDMA uplink after the first PSMM in order to provide seamless soft handoff throughout the service area of a whole cellular telecommunications system.

#### ***Allowable Subject Matter***

Claims 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments, see Pre-Appeal Brief, filed May 29, 2007, with respect to the rejection(s) of claim(s) 1, 2, 4, 6-10, 12 and 14-23 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Willey.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Blakeney, II et al (US 5,640,414) disclose a mobile station assisted soft handoff in a CDMA cellular communications system.

Kumar et al (US 6,073,021) disclose a robust CDMA soft handoff.

Pittampalli et al (US 6,968,186) disclose a system and method for preventing dropped calls.

Chheda et al (US 6,038,448) disclose a wireless communication system having hand-off based upon relative pilot signal strengths.


Paranchych et al (US 6,754,191) disclose a method and apparatus for supplemental channel soft hand off in CDMA systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox  
August 29, 2007



CHARLES N. APPIAH  
SUPERVISORY PATENT EXAMINER